

What Is Claimed Is:

1. A data recording method to record data on a recording medium in accordance with a recording request from a host,

5 wherein

recording is performed by giving different identification data between a case where user data is recorded on the recording medium in accordance with the recording request from the host and a case where additional writing prohibition data is recorded on the recording medium in accordance with an additional writing prohibition request from the host.

2. A data recording method to record data on a recording medium having an address in accordance with a recording request from a host, wherein

15 user data and first identification data are recorded on said recording medium in accordance with the recording request from the host;

an address value of an outermost periphery among recorded addresses used for recording the user data is recorded on said recording medium; and

20 additional writing prohibition data and second identification data are recorded at a non-recorded address position that is at an inner periphery than the address value of said outermost periphery of said recording medium in accordance with the additional writing prohibition request from

the host.

3. The recording method according to Claim 2, wherein the address value of the outermost periphery recorded on said recording medium is stored at a predetermined position of said recording medium in accordance with the additional writing prohibition request from the host.

4. The recording method according to Claim 1, wherein said identification data has a flag added in said identification data.

10 5. The recording method according to Claim 3, wherein, when recording is requested from the host, recording is not performed to the recording medium in which the address value of the outermost periphery is stored at the predetermined position in accordance with the additional writing prohibition request from said host.

6. A data reproducing method for reproducing data of a recording medium having an address value of an outermost periphery stored at a predetermined position in accordance with an additional writing prohibition request from a host, wherein

20 an address value requested to be reproduced from the host and the address value of the outermost periphery stored at the predetermined position of said recording medium are compared and in a case where the requested address value is positioned at an outer periphery than the address value of the outermost periphery, reproduction is not performed.

25

7. The data reproducing method according to Claim 6, wherein, with respect to the recording medium having user data and first identification data recorded in accordance with a recording request from the host and having additional writing prohibition data and second identification data recorded in accordance with the additional writing prohibition request from the host, the identification data is read in accordance with the reproducing request from the host, and in a case of the second identification data, the reproduction of the additional writing prohibition data is not performed.

8. A data recording device to record data on a recording medium in accordance with a recording request from a host, wherein

recording is performed by giving different identification data between a case where user data is recorded on the recording medium in accordance with the recording request from the host and a case where additional writing prohibition data is recorded on the recording medium in accordance with an additional writing prohibition request from the host.

9. A data recording device to record data on a recording medium having an address in accordance with a recording request from a host, comprising:

an encoder that produces first identification data in accordance with the recording request of user data from the host and second identification data in accordance with an

additional writing prohibition request from the host; and

an optical pick-up that records the user data and the first identification data on said recording medium in accordance with the recording request of the user data from the host, records  
5 an address value of said outermost periphery among recorded addresses used for recording the user data and records additional writing prohibition data and the second identification data at a non-recorded address position that is positioned at an inner periphery than the address value of said outermost  
10 periphery of said recording medium in accordance with the additional writing prohibition request from the host.

10. The data recording device according to Claim 9, wherein the address value of the outermost periphery recorded on said recording medium is reproduced from said recording medium and  
15 recorded on a predetermined position on the recording medium in accordance with the additional writing prohibition request from the host.

11. The data recording device according to Claim 8, wherein said identification data has a flag added in said identification  
20 data.

12. The data recording device according to Claim 10, wherein, when recording is requested from the host, recording is not performed to the recording medium in which the address value of the outermost periphery is stored at the predetermined  
25 position in accordance with the additional writing prohibition

request from said host.

13. A data reproducing device for reproducing data of a recording medium having an address value of an outermost periphery stored at a predetermined position in accordance with an additional writing prohibition request from a host, wherein

an address value requested to be reproduced from the host and the address value of the outermost periphery stored at the predetermined position of said recording medium are compared and in a case where the requested address value is positioned at an outer periphery than the address value of the outermost periphery, reproduction is not performed.

14. The data reproducing device according to Claim 13, wherein, with respect to the recording medium having user data and first identification data recorded in accordance with a recording request from the host and having additional writing prohibition data and second identification data recorded in accordance with the additional writing prohibition request from the host, the identification data is read in accordance with the reproducing request from the host, and in a case of the second identification data, the reproduction of the additional writing prohibition data is not performed.

15. A data recording method for recording data having a constant amount on a recording medium in accordance with a recording request from a host, wherein

in a case where user data having a constant amount is

recorded on the recording medium in accordance with the recording request from the host, identification data 1 is added and data optionally produced by a drive is added to the user data with an amount not satisfying the constant amount on the recording medium in accordance with a compulsory recording request from the host, while in a case where data with a constant amount is recorded, the identification data 1 is added to the user data and identification data 2 is given to the added optional data to thereby be recorded.

16. A data reproducing method wherein, with respect to a recording medium having user data and first identification data recorded in accordance with a recording request from a host and having user data and first identification data recorded in accordance with a compulsory recording request from the host and data optionally added by a drive and second identification data, the identification data is read in accordance with a reproducing request from the host, and in a case of the second identification data, the reproduction of the additional data is not performed.

17. A data recording device for recording data on a recording medium having an address in accordance with a recording request from a host, comprising:

a memory circuit for temporarily storing user data transferred with the recording request from the host until the user data reaches a predetermined amount;

an additional data generating circuit for making the user data in the memory circuit have the predetermined amount in accordance with a compulsory recording request from the host;

an encoder that produces first identification data in accordance with the recording request of the user data from the host as well as the first identification data and second identification data in accordance with the compulsory recording request from the host; and

an optical pick-up that records the user data and the first identification data on said recording medium in accordance with the recording request of the user data from the host and records the user data and the first identification data stored in said memory circuit in accordance with the compulsory recording request from the host as well as the additional data produced by said additional data generating circuit and the second identification data.